

SHORT COMMUNICATION

Notes on *Palmeria* F.Muell. (Monimiaceae) in Australia and the application of the name *Palmeria racemosa* (Tul.) A.DC.

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Whiffin & Foreman (2007) revised the genus *Palmeria* F.Muell. (Monimiaceae) for the *Flora of Australia* and recognised three species, viz. *P. foremanii* Whiffin, *P. hypotephra* (F.Muell.) Domin and *P. scandens* F.Muell. They considered *Palmeria scandens* to include *P. coriacea* C.T.White and *P. racemosa* (Tul.) A.DC. However, the legitimate name for this species when these species are considered to be synonymous is *P. racemosa* as its basionym pre-dates *P. scandens* by nine years.

Based on examination of herbarium material and literature at the Queensland Herbarium five species of *Palmeria* (viz. *P. coriacea*, *P. foremanii*, *P. hypotephra*, *P. racemosa* and *P. scandens*) are recognised for Australia. This is due to reinstatement of *P. coriacea* from north-east Queensland and recognition of *P. racemosa* for south-east Queensland and eastern New South Wales populations previously included erroneously in *P. scandens*.

Key to the Australian *Palmeria* species

- 1 Leaves velutinous below and densely covered with white or cream stellate hairs (0.2–0.5 (–0.7) mm diameter). Central coast and NE Qld **3. *P. hypotephra***
- 1. Leaves glabrous or pubescent below, with pale brown or golden stellate hairs (0.3–1.5 mm diameter) or stellate and simple hairs, not covering the leaf surface 2
- 2 Leaves glabrous below or with an occasional stellate hair (0.1–0.4 mm diameter) along the midrib. NE Qld (Thornton Peak, Mt Spurgeon & Tinaroo Range above 900 m) **1. *P. coriacea***
- 2. Leaves pubescent below with either predominantly stellate hairs (0.3–1.3 mm diameter) or a mixture of simple and stellate hairs 3
- 3 Leaves pubescent below with simple hairs (0.3–1.1 mm long) and stellate hairs (0.3–1.3 mm diameter) (occasionally with only simple hairs). Central coast to Cape York, Qld. **5. *P. scandens***
- 3. Leaves pubescent below with stellate hairs (0.3–1.5 mm diameter) and an occasional simple hair 4
- 4 Leaf pubescence below of stellate hairs (0.3–1.5 mm diameter) touching to overlapping. SE Qld, NE NSW **2. *P. foremanii***
- 4. Leaf pubescence below of stellate hairs (0.3–1.1 mm diameter) restricted to midrib, or midrib and lateral veins. SE Qld, E NSW **4. *P. racemosa***

Synopsis of Australian species

1. *Palmeria coriacea* C.T.White, *Proc. Roy. Soc. Queensland* 47: 75 (1936). **Type:** Queensland. COOK DISTRICT: Thornton Peak, 14 March 1932, *L.J. Brass* 2282 (holo: BRI).

Additional selected specimens examined: Queensland. COOK DISTRICT: Mt Misery, NE of Mt Carbine, Nov 1988, *Jessup GJM857, Guymer & McDonald* (BRI); Thornton Peak, Sep 1937, *Tryon s.n.* (BRI [AQ415815]); Mt Spurgeon, Sep 1936, *White 11050* (BRI); Timber Reserve 142, Zarda Logging Area, Jun 1973, *Irvine 651* (BRI); Mt Lewis road, Aug 1995, *Brown 95/294 f, Wiecek & Radford* (BRI); Tinaroo Range, Jun 1949, *Flecker NQNC12894* (BRI).

Distribution and habitat: The species is endemic to north-east Queensland from Mt Misery to Tinaroo Range in rainforest at altitudes above 900 m.

2. *Palmeria foremanii* Whiffin, *Fl. Aust.* 2: 454 (2007). **Type:** Queensland. DARLING DOWNS DISTRICT: The Head, near source of Teviot Creek, 4 May 1978, *K.A.W. Williams* 78049 (holo: BRI; iso: NSW, CANB *n.v.*, K *n.v.*).

Palmeria scandens var. *hirsuta* Domin, *Biblioth. Bot.* 89: 120 (1926). **Type:** Queensland: MORETON DISTRICT: “Regenwalder der Tambourine Mts”, January 1910, *K. Domin s.n.* (holo: PR, *n.v.*).

Additional selected specimens examined: Queensland. MORETON DISTRICT: Mt Glorious, Apr 1961, *Cribb s.n.* (BRI [AQ170425]); Tamborine Mt, Jan 1924, *Simmonds s.n.* (BRI [AQ63652]); Numinbah F.R., Springbrook Plateau, Jul 2006, *Halford Q9114* (BRI); Lyrebird Ridge road, Springbrook, May 1984, *Guymer 1892* (BRI); *ditto loc.*, Jan 2000, *Forster PIF2527 & Leiper* (BRI). DARLING DOWNS DISTRICT: Near Moss Gardens, The Head to Killarney road, Jan 2000, *Forster PIF25273* (BRI). **New South Wales.** NORTH COAST: Acacia Plateau, Mar 1944, *White 12567* (BRI); N Yabba road, Yabba S.F., E of Urbenville, May 1998, *Bean 13233* (BRI, NSW); Track to Minyon Falls, Apr 1984, *Guymer 1881* (BRI); Whian Whian S.F., Jun 1945, *White 12832* (BRI).

Distribution and habitat: The species is endemic to eastern Australia from Mt Glorious, Queensland to Whian Whian State Forest, New South Wales at altitudes between 100 and 1100 m. It occurs in rainforests on soils derived mainly from basalt.

3. *Palmeria hypotephra* (F.Muell.) Domin, *Repert. Spec. Nov. Regni Veg.* 12: 390 (1913); *Morinda hypotephra* F.Muell., *Vic. Nat.* 6: 55 (1889). **Type:** Queensland. COOK DISTRICT: Mt Bellenden Ker, in 1887, *W.A. Sayer s.n.* (lecto: MEL, *n.v.*); *vide* Whiffin & Foreman (2007).

Additional selected specimens examined: Queensland. COOK DISTRICT: Top of Mt Hartley, Jul 1995, *Forster PIF17320 & Figg* (BRI); Whyanbeel, Dec 1978, *Gray 1185* (BRI); Mt Bellenden Ker summit, Dec 2001, *Forster PIF27935 & PIF27942* (BRI); The Boulders, W of Babinda, Jul 1999, *Forster PIF24665* (BRI); Westcott road, Topaz, Nov 1989, *Forster PIF25154, Booth & Cooper* (BRI); Tully Falls Weir, May 2003, *Forster PIF29392* (BRI). NORTH KENNEDY DISTRICT: Millet Farm, Ravenshoe, Apr 1940, *Samundsett 3* (BRI); Alma Gap S.F., 22 km NW of Cardwell, Oct 1988, *Jessup GJM2404, Guymer & McDonald* (BRI); Paluma, Jun 1988, *Jacks 1* (BRI). SOUTH KENNEDY DISTRICT: Dalrymple road to Mt William, Eungella N.P., *s.d.*, *Pearson SP462* (BRI).

Distribution and habitat: The species is endemic to north-east Queensland from Mt Hartley to Eungella, west of Mackay. It occurs in simple microphyll fern thicket, low microphyll vineforest and complex notophyll and mesophyll vineforest from near sea-level to 1570 m.

4. *Palmeria racemosa* (Tul.) A.DC., *Prodr.* 16(2): 657 (1868); *Hedycarya racemosa* Tul., *Ann. Sci., Nat. Bot.*, ser. 4, 3: 45 (1855). **Type:** Nova Hollandia, in 1834, *Hügel s.n.* (syn: P *n.v.*; W *n.v.*); Nova Hollandia, *s.d.*, *Baume s.n.* (syn: P *n.v.*; W *n.v.*).

Additional selected specimens examined: Queensland. WIDE BAY DISTRICT: Kin Kin, Mar 1916, *Francis s.n.* (BRI [AQ63661]). MORETON DISTRICT: Sunday Creek road, Conondales, Jan 2002, *Forster PIF28094 & Leiper* (BRI). **New South Wales.** NORTHERN TABLELANDS: Slaty Fire trail, Girard S.F., ENE of Tenterfield, Apr 2004, *Bean 21931* (BRI). NORTH COAST: Dorrigo S.F., Oct 1930, *White 7503* (BRI); Below Cameron’s Camp on Hasting Forest Highway, Mar 1978, *Hind 2234* (BRI); Upper Williams River, near Salisbury, Mar 1938, *White 11603* (BRI); Macquarie Pass, Jan 1962, *Burgess 15243* (BRI).

Distribution and habitat: The species is endemic to eastern Australia from Kin Kin, south-east Queensland to Bateman’s Bay, south coast of New South Wales. It occurs in rainforests and on rainforest margins from near sea level to 1000 m altitude.

Notes: Hügel's specimen of *Palmeria racemosa* would have been collected between April and October 1834 when he visited areas from the Hunter River to Illawarra, New South Wales (Clark 1994).

5. *Palmeria scandens* F.Muell., *Fragm.* 4: 152 (1864); *Palmeria scandens* var. *scandens*, Domin, *Biblioth. Bot.* 89: 120 (1926). **Type:** Queensland. NORTH KENNEDY DISTRICT: Rockingham Bay, in 1863, *J.Dallachy s.n.* (lecto: MEL 2050674 *n.v.*); *fide* Whiffin & Foreman (2007).

Additional selected specimens examined: Queensland. COOK DISTRICT: Mt Finnegan summit area, Oct 1999, *Forster PIF25037 & Booth* (BRI); Noah Creek, Dec 2001, *Forster PIF27896, Young & Booth* (BRI); S.F. 194, Mt Baldy, Dec 2001, *Forster PIF27998* (BRI); Jordan Logging Area, 16.5 km SE of Millaa Millaa, Oct 1988, *Jessup GJM2070, Guymer & McDonald* (BRI); Yarrabah, Aug 1918, *Michael s.n.* (BRI [AQ63664]). NORTH KENNEDY DISTRICT: Bishop Peak, Hinchinbrook Channel N.P., N of Ingham, May 1991, *Bean 3244* (BRI); Headwaters of Dryander Creek, Mt Dryander, Oct 1969, *Webb & Tracey 10034* (BRI). SOUTH KENNEDY DISTRICT: Dalrymple road, Eungella N.P., Apr 2000, *Forster PIF25509 & Booth* (BRI).

Distribution and habitat: The species is endemic to Queensland from the McIlwraith Range, Cape York to Eungella National Park, west of Mackay, in rainforests or on rainforest margins from near sea-level to 1200 m altitude.

Discussion

Brophy *et al.* (2004) analysed the essential oils from the leaves of Australian species of *Palmeria* (Monimiaceae) excluding *P. coriacea*. The results from their samples using the classification above shows that *P. foremanii* (*Forster PIF25277*) has eight unique compounds, *P. hypotephra* (*Forster PIF27935*) has four unique compounds, *P. racemosa* (*Forster PIF28094*) has five unique compounds and *P. scandens* (*Forster PIF25509, PIF25037 & PIF27596*) has no unique compounds with the exception of *Forster PIF27998* from Mt Baldy which has five unique compounds. This collection differs from the other *P. scandens* in having only simple hairs on the branchlets and leaves and may represent a distinct taxon.

References

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